

MYSIDOPSIS BAHIA, A NEW SPECIES OF MYSID
(CRUSTACEA: MYSIDACEA) FROM
GALVESTON BAY, TEXAS¹

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ABSTRACT

A new species of mysid, *Mysidopsis bahia*, is described from West Bay, Galveston, Texas. This mysid was found in three areas within the Galveston Bay system. The salinity at the collection sites varied from 18‰ to 29‰ and the temperature, from 24°C to 32°C. *M. bahia* differs from *M. almyra* and *M. bigelowi*, which also have been reported from the Gulf of Mexico, by the armature of the telson, the number of spines on the uropod together with an unsegmented antennal scale.

Specimens of a new species of mysid were collected during the week of November 22, 1965, near the northwest shore of Galveston Island in West Bay. A hand screen was used to collect them in water one-half meter deep, close to shore. The salinity was 28‰ and the temperature was 24°C. The following description is based on the laboratory-reared progeny of these specimens.

Mysidopsis bahia,³ new species

Figures 1-18

Description. Length of adults from anterior margin of carapace to end of uropods, excluding setae, varies from 4.4 mm to 9.8 mm. Anterior margin of carapace roundly triangular, not produced into rostrum; posterior margin concave; somite 8 exposed in dorsal view. Eye rounded and slightly kidney shaped. Telson linguiform with bluntly rounded apex; lateral margins usually with

19-22 short spines on each side; apex with 4-5 pairs of closely set strong spines in adults; central pair longest, about $\frac{1}{4}$ as long as telson. Third segment of antenna 1 of male with lobe bearing thick fine setae. Scale of antenna 2 narrowly lanceolate composed of single segment which bears setae along entire length on each side. Labrum rounded anteriorly; posterior margin with small central indentation, middle portion with short setae. Molar of mandible reduced or absent; incisor of left mandible with 7 teeth, right with 6 teeth; left lacinia mobilis broad with 6 teeth; right lacinia smaller, constricted at base, with 7 teeth; medial row of closely set stout spines, 10-12; on left mandible this row ends with tuft of setae. Palp well developed. Outer plate of maxilla 1 with 8 spines at apex; inner plate with 2 setae at apex and 1 on outer margin. Proximal lobe of maxilla 2 with 4 setae on truncate apex; exopod usually bears 6-10 setae. Thoracic leg 1 (maxilliped) short, stout. Endopod of leg 2 slender, ending in spine. Endopod of male pleopod 4 with single lobe bearing 4 stout spines, 1 short spine, exopod longer than endopod with long apical spine. Exopod of uropod about twice as long as telson, curved gently outward; endopod about $\frac{3}{4}$ as long as exopod, armed on ventral surface with 2 to 3 spines near medial margin distal to statocyst.

Color. Living specimens usually transparent. However, color may be distributed over

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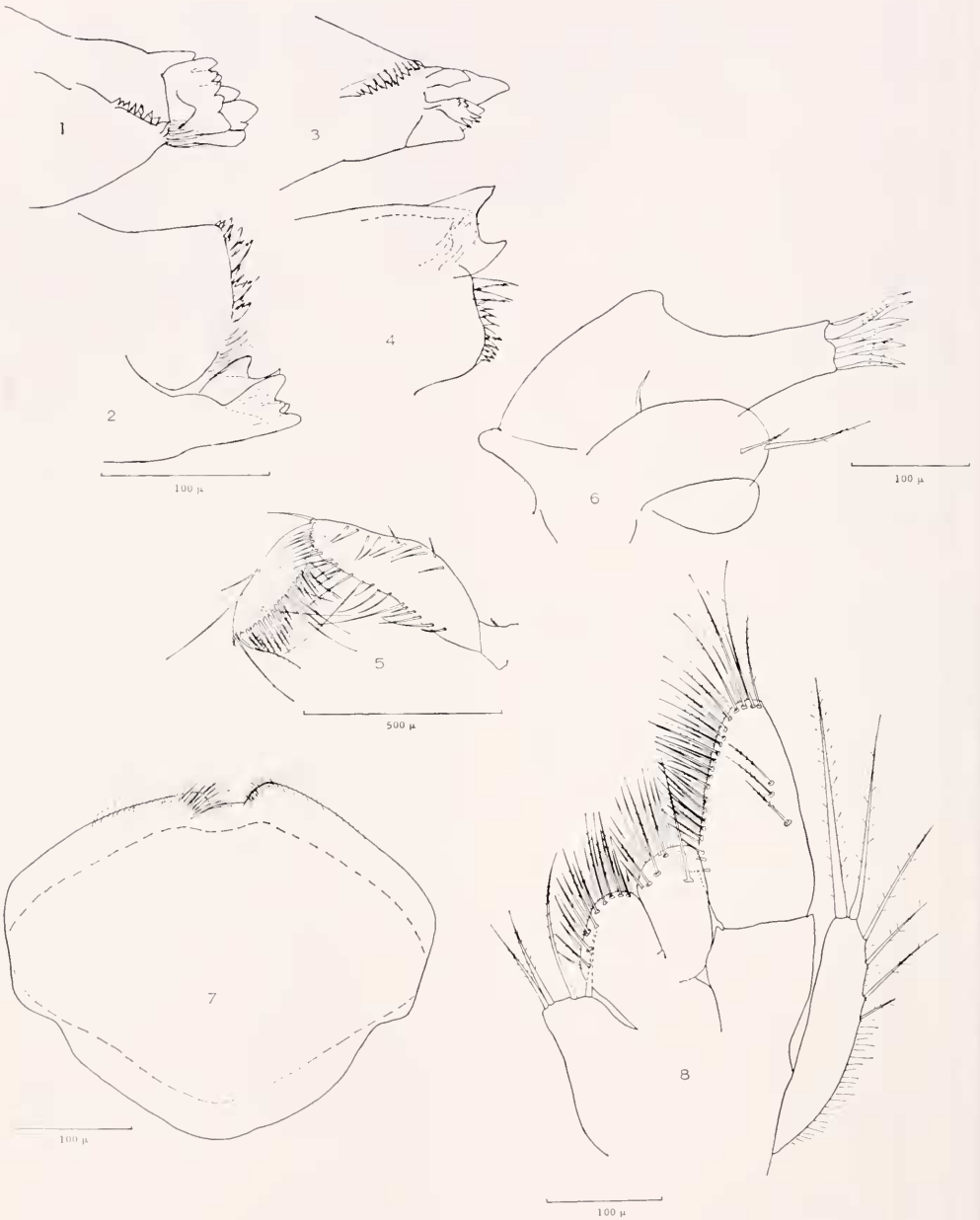
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³ From the Spanish *bahia*, bay.

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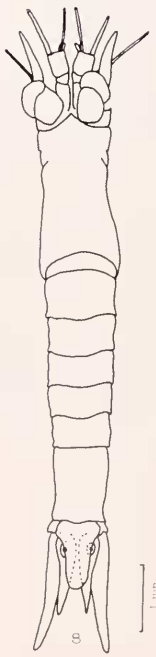
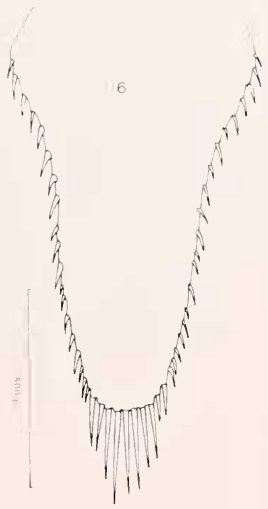
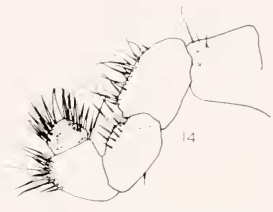
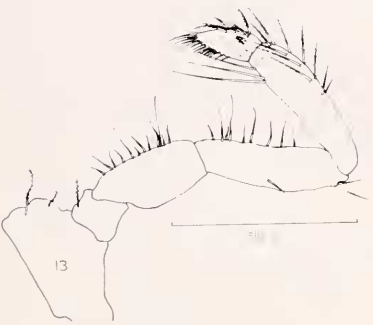
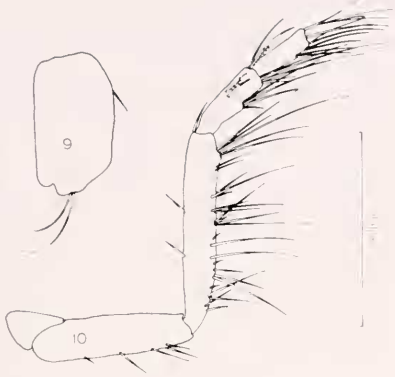
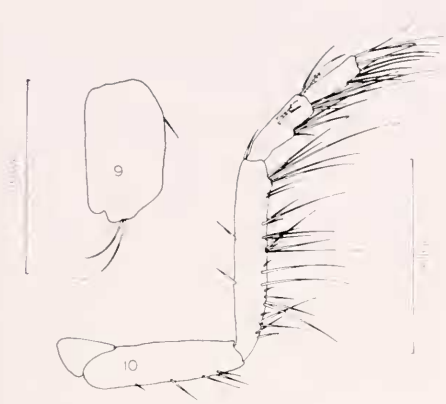
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Figures 1-8. *Mysidopsis bahia*, new species. 1. Left mandible, gnathobasic process, oblique internal view. 2. Left mandible, gnathobasic process, internal view. 3. Right mandible, gnathobasic process, oblique internal view. 4. Right mandible, gnathobasic process, internal view. 5. Left mandibular palp. 6. Maxilla 1. 7. Labrum. 8. Maxilla 2.

Figures 9-18. *Mysidopsis bahia*, new species. 9. Genital appendage, male. 10. Thoracic leg 8. 11. Antenna 1, ventral, male. 12. Antenna 2. 13. Thoracic leg 2. 14. Thoracic leg 1. 15. Pleopod 4, male. 16. Telson. 17. Right uropod, dorsal. 18. Male, dorsal.



entire surface of animal in yellows, browns or blacks. Dorsally, preserved specimens have 2 contracted chromatophores at base of telson; ventrally, 1 pair at base of mouthparts, 2 pairs on thorax, 5 median chromatophores on abdomen.

Types. The male holotype, USNM 113832, is a specimen reared in the laboratory from those originally collected in November 1965. Fourteen similarly reared specimens are designated as paratypes, USNM 113834. Twenty-two field specimens are also designated as paratypes, USNM 113833.

Occurrence. This mysid has been found at several locations within the Galveston Bay system. My original collection site was West Bay. *Ruppia maritima* occurred in patches on a sand bottom. Using a hand screen I collected this mysid and postlarval *Penaeus*, *Tozeuma*, *Hippolyte* and *Palaemonetes*. Field paratypes were collected by Mr. Cornelius R. Mock in Lake Como, an inlet of West Bay. The specimens that I examined from this site were collected from July through September 1966. A net tow of 15 m along the bottom yielded hundreds of specimens of *M. babia*. The bottom in Lake Como was sand, the salinity during this period varied between 22‰ and 29‰, and the temperature ranged from 24°C to 32°C. Additional specimens given to me by Dr. David V. Aldrich were collected in September 1964 from Clear Lake, which is a secondary bay opening into Galveston Bay. The salinity in Clear Lake was 18‰ and the temperature, 29°C at the time of collection. Mock (1966) reported this site (A) with a bottom consisting of a uniform mixture of sand, silt and clay.

Remarks. Two species of *Mysidopsis* have been reported from the Gulf of Mexico (Bowman, 1957, 1964; Clarke, 1956; Tat-

tersall, 1926, 1951), *M. almyra* Bowman and *M. bigelowi* Tattersall. An unsegmented antennal scale serves to distinguish *M. babia* and *M. bigelowi* from *M. almyra* which has a segmented antennal scale. *M. babia* and *M. almyra* have a slender second leg while in *M. bigelowi* this leg is robust. The number of strong spines on the apex of the telson also differentiates these species; *M. bigelowi* has 3 pairs, *M. babia*, 4-5 pairs, and *M. almyra*, 6-7 pairs. An additional distinguishing character is the number of spines on the endopod of the uropod; *M. almyra* has 1 spine, *M. babia*, 2-3 spines and *M. bigelowi*, 5 spines.

Acknowledgments

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